



**CALIFORNIA STATE SCIENCE FAIR
2008 PROJECT SUMMARY**

Name(s) Amanda B. Castilo	Project Number J0206
Project Title Goal! Can You Handle the Pressure?	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals Show how different inflation levels affect the distance that a soccer ball will travel when it is kicked.</p> <p>Methods/Materials First, we made a large pendulum using 2 ten foot ladders and a sledgehammer taped onto 1# electrical metallic tubing. The ball was hit ten times for each air pressure; 3 psi, 8 psi, 14 psi. Record the distance at where the ball first hits the ground.</p> <p>Results Although the inflation levels were different, the distance that the soccer ball traveled stayed in the range of 25#-0# to 30#-0#.</p> <p>Conclusions/Discussion The ideal air pressure for a soccer ball is 6-8 psi. Higher inflation levels may make the ball travel further but it doesn't make a big difference. I think acceleration is a bigger factor in making the ball travel further.</p>	
Summary Statement Changes in inflation levels does not adversely affect the distance a soccer ball travels when kicked.	
Help Received Mr. Dettmer, advice on how to eliminate variables.; Dad helped me set up the pendulum ; Mom recorded measurements; Sister retrieved balls hit.	